

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 11/17/2020 Revision date: 3/29/2023 Supersedes version of: 3/14/2023 Version: 15.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Epoxy Putty 2122 Hardener  
UFI : XNEF-CV14-2008-QF5M  
Product code : 307435

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

No additional information available

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Cedesa Ltd  
Chater Lea Buildings Icknield Way  
SG6 1WT Letchworth Garden City  
United Kingdom  
T 01462 480764  
[sales@cedesa.co.uk](mailto:sales@cedesa.co.uk) - [www.cedesa.co.uk](http://www.cedesa.co.uk)

Australian Distributor: Hubbell Harsh & Hazardous  
20 Oakdene Drive  
Madeley  
Western Australia  
6065, Australia  
Contact: Callum Atkinson  
T: PH: +61 (0)8 9409 6339 Mb: +61 (0)488 155 160  
Email: [catkinson@hubbell.com.au](mailto:catkinson@hubbell.com.au)

#### 1.4. Emergency telephone number

Emergency number : 01462 480764

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 2	H361f
Specific target organ toxicity – Repeated exposure, Category 1	H372
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS07

GHS08

GHS09

Signal word (CLP) :

Danger

Contains :

SILICA QUARTZ; 4-TERT BUTYLPHENOL; 3,6-DIAZAOCCTANETHYLENEDIAMIN;  
TRIETHYLENETETRAMINE

Hazard statements (CLP) :

H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H318 - Causes serious eye damage.

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Precautionary statements (CLP)	H361f - Suspected of damaging fertility. H372 - Causes damage to organs through prolonged or repeated exposure. H411 - Toxic to aquatic life with long lasting effects. : P201 - Obtain special instructions before use. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. P321 - Specific treatment (see supplemental first aid instruction on this label). P391 - Collect spillage.
--------------------------------	---

### 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

Component	
4-TERT BUTYLPHENOL (98-54-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

Component	
4-TERT BUTYLPHENOL(98-54-4)	The substance is included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
SILICA QUARTZ substance with a Community workplace exposure limit	CAS-No.: 14808-60-7 EC-No.: 238-878-4 REACH-no: 01-2120770509-45	$\geq 50 - < 80$	STOT RE 1, H372
TALC	CAS-No.: 14807-96-6 EC-No.: 238-877-9 REACH-no: 01-2120140278-58	$\geq 10 - < 30$	Acute Tox. 4 (Inhalation:dust,mist), H332 STOT RE 2, H373
Fatty acids, C18-unsatd., dimers,oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	CAS-No.: 68082-29-1 EC-No.: 500-191-5 REACH-no: 01-2119972320-44	$\geq 10 - < 30$	Aquatic Chronic 2, H411

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
4-TERT BUTYLPHENOL substance listed as REACH Candidate substance identified as having endocrine disrupting properties	CAS-No.: 98-54-4 EC-No.: 202-679-0 EC Index-No.: 604-090-00-8 REACH-no: 01-2119489419-21	≥ 5 – < 20	Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361f Aquatic Chronic 1, H410
Tris-2,4,6-(dimethylaminomethyl)phenol	CAS-No.: 90-72-2 EC-No.: 202-013-9 REACH-no: 01-2119560597-27	< 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Chronic 3, H412
3,6-DIAZAOCTANETHYLENEDIAMIN; TRIETHYLENETETRAMINE	CAS-No.: 112-24-3 EC-No.: 203-950-6 EC Index-No.: 612-059-00-5	< 2.5	Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Call a doctor.
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Wash skin with plenty of water. Do not remove clothing if it sticks to the skin. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Call a physician immediately. Immediately rinse with water for a prolonged period while holding the eyelids wide open. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. Rinse mouth out with water. Call a poison center or a doctor if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May cause respiratory irritation. May cause shortness of breath, tightness of the chest, a sore throat and cough.
Symptoms/effects after skin contact	: irritation (itching, redness, blistering). Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye irritation. Redness. Risk of blurred vision. Serious damage to eyes.
Symptoms/effects after ingestion	: Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. May cause stomach cramps and vomiting.

### 4.3. Indication of any immediate medical attention and special treatment needed

Eye bathing equipment should be available on the premises.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers. Water spray. Dry powder. Foam.
------------------------------	--

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : In combustion emits toxic fumes.

### 5.3. Advice for firefighters

Protection during firefighting : Self-contained breathing apparatus. Complete protective clothing. Do not attempt to take action without suitable protective equipment.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses.

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.  
Methods for cleaning up : Mechanically recover the product. This material and its container must be disposed of in a safe way, and as per local legislation. Notify authorities if product enters sewers or public waters.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid any direct contact with the product. Ventilate the area thoroughly. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.  
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in a well-ventilated place.  
Packaging materials : Keep only in the original container in a cool, well-ventilated place away from combustible materials.

### 7.3. Specific end use(s)

No additional information available

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

###### SILICA QUARTZ (14808-60-7)

###### EU - Indicative Occupational Exposure Limit (IOEL)

Local name	Silica crystalline (Quartz)
IOEL TWA	0.05 mg/m <sup>3</sup> (respirable dust)
Remark	(Year of adoption 2003)
Regulatory reference	SCOEL Recommendations

###### Austria - Occupational Exposure Limits

Local name	Quarzfeinstaub (alveolengängiges kristallines Siliziumdioxid)
MAK (OEL TWA)	0.05 mg/m <sup>3</sup> (A)
Remark	Krebserzeugend: III C
Regulatory reference	BGBl. II Nr. 156/2021

###### Austria - Biological limit values

Local name	Quarz Staub
Remark	<p>Eignung mit vorzeitiger Folgeuntersuchung: Bei Vorliegen einer wesentlichen Beeinträchtigung der Lungenfunktion. Diese liegt jedenfalls vor, wenn nach mehrmaliger Messung der beste gemessene Wert den für den/die Untersuchte/n maßgebenden Sollwert um 20% unterschreitet bzw. den MEF50-Sollwert um 50% unterschreitet. Eine vorzeitige Folgeuntersuchung ist jedoch nicht erforderlich, wenn im Vergleich zu Vorbefunden der altersabhängige physiologische Abfall der 1-Sekundenkapazität (FEV1) von 40 ml/Jahr nicht überschritten wird oder aus der Beurteilung des Kurvenverlaufes der Forcierten Vitalkapazität (FVC) eine eingeschränkte Mitarbeit des Untersuchten/der Untersuchten ersichtlich ist.</p> <p>Der Zeitabstand zwischen den Untersuchungen beträgt bei Eignung: zwei Jahre bzw. für die Röntgenuntersuchung 4 Jahre; bei Eignung mit vorzeitiger Folgeuntersuchung: ein Jahr. Sofern eine vorzeitige Folgeuntersuchung lediglich auf Grund veränderter Lungenfunktionswerte erfolgt, ist die Lungenfunktionsprüfung durchzuführen, jedoch keine Röntgen-Aufnahme anzufertigen.</p>
Regulatory reference	Verordnung über die Gesundheitsüberwachung am Arbeitsplatz 2017 (VGÜ 2017)

###### Belgium - Occupational Exposure Limits

Local name	Silices cristallines: quartz (poussières alvéolaires) # Siliciumdioxide (kristallijn): kwarts (inadembaar stof)
OEL TWA	0.1 mg/m <sup>3</sup>
Remark	C: la mention "C" signifie que l'agent en question relève du champ d'application du titre 2 relatif aux agents cancérigènes, mutagènes et reprotoiques du livre VI du code de bien-être au travail. # C: de vermelding "C" betekent dat het betrokken agens valt onder het toepassingsgebied van titel 2 betreffende kankerverwekkende, mutagene en reprotoxische agentia van boek VI van de codex over het welzijn op het werk.
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021

###### Croatia - Occupational Exposure Limits

Local name	Kristalni SiO <sub>2</sub> , kvarc
GVI (OEL TWA) [1]	0.1 mg/m <sup>3</sup>
Regulatory reference	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>SILICA QUARTZ (14808-60-7)</b>	
<b>Denmark - Occupational Exposure Limits</b>	
Local name	Kvarts
OEL TWA [1]	0.3 mg/m <sup>3</sup> total 0.1 mg/m <sup>3</sup> total, respirabel
Remark	E (betyder, at stoffet har en EF-grænseværdi); K (betyder, at stoffet anses for at kunne være kræftfremkaldende)
Regulatory reference	BEK nr 1054 af 28/06/2022
<b>Estonia - Occupational Exposure Limits</b>	
Local name	Kvarts
OEL TWA	0.1 mg/m <sup>3</sup> peentolm
Remark	1 (Peentolm koosneb alla 2,5-mikromeetrise läbimõõduga osakestest, mis võivad jõuda koos sissehingatava õhuga kopsu alveoolidesse (respireeritav fraktsioon)), C (Kantserogeenne aine)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 15.05.2021, 1)
<b>Finland - Occupational Exposure Limits</b>	
Local name	Kvartsi
HTP (OEL TWA) [1]	0.05 mg/m <sup>3</sup> alveolijae
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
<b>France - Occupational Exposure Limits</b>	
Local name	Silice (poussières alvéolaires de quartz)
VME (OEL TWA)	0.1 mg/m <sup>3</sup>
Remark	Valeurs réglementaires contraignantes
Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016; Décret n° 2019-1487; Décret n° 2020-1546; Décret n° 2021-434; Décret n° 2021-1849)
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Quartz, respirable dust
OEL TWA [1]	0.1 mg/m <sup>3</sup>
Remark	BOELV (Binding Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2021
<b>Lithuania - Occupational Exposure Limits</b>	
Local name	Įkvepiamojo kristalinio silicio dioksido dulkės (išskyrus kristobalitą ir tridimitą)
IPRV (OEL TWA)	0.1 mg/m <sup>3</sup> (alveolinė frakcija)
Remark	Kristalinio silicio dioksido formas yra šios: alfa kvarcas, beta kvarcas, alfa tridimitas, beta tridimitas, alfa kristobalitas, beta kristobalitas, kititas, koesitas, stišovitas ir moganitas. Kristobalitui ir tridimitui RD nustatytas atskirai.
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-457/A1-154, 2022-07-18)
<b>Netherlands - Occupational Exposure Limits</b>	
Local name	Respirabel kristallijn silicastof: – kwarts
TGG-8u (OEL TWA)	0.075 mg/m <sup>3</sup> Respirabele fractie
Remark	Kankerverwekkende stof
Regulatory reference	Arbeidsomstandighedenregeling 2022

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>SILICA QUARTZ (14808-60-7)</b>	
<b>Poland - Occupational Exposure Limits</b>	
Local name	Krzemionka krystaliczna – kwarc
NDS (OEL TWA)	0.1 mg/m <sup>3</sup> frakcja respirabilna
Remark	Frakcja respirabilna – frakcja aerozolu wnikająca do dróg oddechowych, która stwarza zagrożenie dla zdrowia po zdeponowaniu w obszarze wymiany gazowej.
Regulatory reference	Dz. U. 2018 poz. 1286
<b>Portugal - Occupational Exposure Limits</b>	
Local name	Silica, cristalina α-Quartzo
OEL TWA	0.025 mg/m <sup>3</sup> R (Fração respirável)
Remark	A2 (Agente carcinogénico confirmado nos animais de laboratório con relevância desconhecida no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
<b>Slovakia - Occupational Exposure Limits</b>	
Local name	Oxid kremičitý, kryštallický
NPHV (OEL TWA) [1]	0.1 mg/m <sup>3</sup> respirabilná frakcia (TSH)
Remark	Kategória karcinogénov 1A – Dokázaný karcinogén pre ľudí
Regulatory reference	Nariadenie vlády č. 356/2006 Z. z. (235/2020 Z. z.)
<b>Spain - Occupational Exposure Limits</b>	
Local name	Sílice Cristalina: Cuarzo
VLA-ED (OEL TWA) [1]	0.05 mg/m <sup>3</sup> Fracción respirable
Remark	v (Agente cancerígeno con valor límite vinculante recogido en el anexo III del Real Decreto 665/1997 y en sus modificaciones posteriores), d (Véase UNE EN 481: Atmósferas en los puestos de trabajo. Definición de las fracciones por el tamaño de las partículas para la medición de aerosoles), y (Reclasificado, por la International Agency for Research on Cancer (IARC) de grupo 2A (probablemente carcinogénico en humanos) a grupo 1 (carcinogénico en humanos)).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2022. INSHT
<b>Sweden - Occupational Exposure Limits</b>	
Local name	Kvarts
NGV (OEL TWA)	0.1 mg/m <sup>3</sup> respirabel fraktion; Se även: Kristobalit och Tridymit
Remark	C (Ämnet är cancerframkallande. Risk för cancer finns även vid annan exponering än via inandning. För vissa cancerframkallande ämnen som inte har gränsvärden gäller förbud eller tillståndskrav enligt föreskrifterna om kemiska arbetsmiljörisker); M (Medicinska kontroller kan krävas för hantering av ämnet. Se vidare föreskrifterna om medicinska kontroller i arbetslivet. För vissa ämnen ska arbetsgivaren erbjuda läkarundersökning och för andra ämnen gäller krav på periodisk läkarundersökning och tjänstbarhetsbedömning); 3 (Den respirabla fraktionen är de inhalerbara partiklar som når längst ner i luftvägarna, till alveolerna i lungorna)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
<b>Norway - Occupational Exposure Limits</b>	
Local name	Krystallinsk silika (SiO <sub>2</sub> ), α-kvarts
Grenseverdi (OEL TWA) [1]	0.3 mg/m <sup>3</sup> Totalstøv 0.1 mg/m <sup>3</sup> Respirabelt støv

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>SILICA QUARTZ (14808-60-7)</b>	
Remark	K: Kjemikalier som skal betraktes som kreftfremkallende; G: EU har fastsatt en bindende grenseverdi og/eller anmerkning for stoffet; 7) Støv som inneholder $\alpha$ -kvarts, kristobalitt og/eller tridymitt vurderes ut fra summasjonsformel. Samtidig må verdiene for sjenerende støv overholdes.
Regulatory reference	FOR-2021-06-28-2248
<b>North Macedonia - Occupational Exposure Limits</b>	
Local name	силика (кремен)
OEL TWA	0.15 mg/m <sup>3</sup> (A) алвеоларна фракција – дел на вдишани суспендирани материји, кои доспеваат до алвеолите
Remark	(Y)
Regulatory reference	Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанции („Службен весник на Република Македонија“ бр.46/10)
<b>Switzerland - Occupational Exposure Limits</b>	
Local name	Dioxyde de silicium cristallisé [Quartz, Cristobalite, Tridymite] / Siliciumdioxid, kristallin [Quarz, Tridymit, Cristobalit]
MAK (OEL TWA) [1]	0.15 mg/m <sup>3</sup> (a) / (a)
Critical toxicity	Cancpulm, Silicose / Lungenkrebs, Silikose
Notation	C1 <sub>A</sub> , SS <sub>C</sub> , P / C1 <sub>A</sub> , SS <sub>C</sub> , P
Remark	HSE, NIOSH, OSHA
Regulatory reference	www.suva.ch, 28.03.2022
<b>TALC (14807-96-6)</b>	
<b>Austria - Occupational Exposure Limits</b>	
Local name	Talk (asbestfaserfrei)
MAK (OEL TWA)	2 mg/m <sup>3</sup> (A)
Regulatory reference	BGBI. II Nr. 156/2021
<b>Belgium - Occupational Exposure Limits</b>	
Local name	Talc (sans fibre d'amiante, poussières alvéolaires) # Talk (asbestvrij, inadembedbaar stof)
OEL TWA	2 mg/m <sup>3</sup>
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
<b>Bulgaria - Occupational Exposure Limits</b>	
Local name	Талк (талкомагнезит, медицински талк), съдържаш под 2 % свободен кристален силициев диоксид в респирабилната фракция
OEL TWA	6 mg/m <sup>3</sup> (Влакнести частици (фини) - Инхалабилна фракция) 3 mg/m <sup>3</sup> (Влакнести частици (фини) - Респирабилна фракция)
OEL TWA [ppm]	1 fibers/cm <sup>3</sup> (Влакна-респирабилна фракция)
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
<b>Croatia - Occupational Exposure Limits</b>	
Local name	Talk (Mg <sub>3</sub> H <sub>2</sub> (SiO <sub>3</sub> ) <sub>4</sub> )
GVI (OEL TWA) [1]	1 mg/m <sup>3</sup> R (respirabilna prašina)



# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

TALC (14807-96-6)	
Regulatory reference	Pravidnik o zaštitu radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
<b>Czech Republic - Occupational Exposure Limits</b>	
Local name	Mastek
PEL (OEL TWA)	2 mg/m <sup>3</sup> (pro respirabilní frakci, ≤ 5 % křemen, kristobalit, tridymit nebo gama-oxid hlinitý) 10 mg/m <sup>3</sup> (pro celkovou koncentraci)
Remark	Prachy s převážně fibrogenným účinkem. d) Za přítomnosti početní koncentrace respirabilních vláken v pracovním ovzduší, musí být dodržen přípustný expoziční limit pro azbest.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
<b>Denmark - Occupational Exposure Limits</b>	
Local name	Talkum med asbest i form af fibre
OEL TWA [1]	0.003 fibers/cm <sup>3</sup>
Remark	K (betyder, at stoffet anses for at kunne være kræftfremkaldende)
Regulatory reference	BEK nr 1054 af 28/06/2022
<b>Finland - Occupational Exposure Limits</b>	
Local name	Talkki
HTP (OEL TWA) [1]	0.5 fibers/cm <sup>3</sup> kuitumainen
HTP (OEL STEL) [ppm]	2 ppm rakeinen, hengittyvä pöly 1 ppm rakeinen, alveolijae
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
<b>Greece - Occupational Exposure Limits</b>	
Local name	Τάλκης (χωρίς αμίαντο)
OEL TWA	10 mg/m <sup>3</sup> εισπν. 2 mg/m <sup>3</sup> αναπν.
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Talc
OEL TWA [1]	10 mg/m <sup>3</sup> total inhalable dust 0.8 mg/m <sup>3</sup> respirable dust
Regulatory reference	Chemical Agents Code of Practice 2021
<b>Netherlands - Occupational Exposure Limits</b>	
Local name	Talk
TGG-8u (OEL TWA)	0.25 mg/m <sup>3</sup> (respirabel)
Regulatory reference	Arbeidsomstandighedenregeling 2023
<b>Poland - Occupational Exposure Limits</b>	
Local name	Talk
NDS (OEL TWA)	4 mg/m <sup>3</sup> frakcja wdychalna 1 mg/m <sup>3</sup> frakcja respirabilna

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

TALC (14807-96-6)	
Remark	Frakcja wdychalna – frakcja aerozolu wnikająca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia. Frakcja respirabilna – frakcja aerozolu wnikająca do dróg oddechowych, która stwarza zagrożenie dla zdrowia po zdeponowaniu w obszarze wymiany gazowej. Obowiązuje jednocześnie oznaczenie stężeń włókien respirabilnych azbestu.
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Talco
OEL TWA	2 mg/m <sup>3</sup> Sem fibras de amianto. E (O valor aplica-se a partículas sem amianto e contendo menos de 1 % de sílica cristalina), R (Fração respirável) 2 mg/m <sup>3</sup> Com fibras de amianto. K (Partículas respiráveis) 0.1 fibers/cm <sup>3</sup> Com fibras de amianto
Remark	Sem fibras de amianto: A4 (Agente não classificável como carcinogénico no Homem). Com fibras de amianto: A1 (Agente carcinogénico confirmado no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
Romania - Occupational Exposure Limits	
Local name	Talc (fără fibre de azbest și fără cuarț ≥ 1%)
OEL TWA	2 mg/m <sup>3</sup> fracție respirabilă
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
Sweden - Occupational Exposure Limits	
Local name	Talk
NGV (OEL TWA)	2 mg/m <sup>3</sup> totaldamm 1 mg/m <sup>3</sup> respirabel fraktion
Remark	3 (Den respirabla fraktionen är de inhalerbara partiklar som når längst ner i luftvägarna, till alveolerna i lungorna. Med totaldamm menas de partiklar (aerosoler) som fastnar på ett filter i den provtagare som beskrivs i Metodserien, Provtagning av totaldamm och respirabelt damm, Metod nr 1010, Arbetarskyddsstyrelsen, numera Arbetsmiljöverket. Filterdiametern är normalt 37 mm, men kan även vara 25 mm. Trots sitt namn provtas inte den totala mängden luftburna partiklar med denna metod)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
United Kingdom - Occupational Exposure Limits	
Local name	Talc
WEL TWA (OEL TWA) [1]	1 mg/m <sup>3</sup> respirable dust
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Iceland - Occupational Exposure Limits	
Local name	Talkúm sem inniheldur þræði
OEL TWA [ppm]	0.3 fibers/cm <sup>3</sup>
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
North Macedonia - Occupational Exposure Limits	
Local name	тaлк - без азбестни влакна
OEL TWA	2 mg/m <sup>3</sup> (A) алвеоларна фракција – дел на вдишани суспендирани материји, кои доспеваат до алвеолите
Remark	(Y)

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

TALC (14807-96-6)	
Regulatory reference	Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанции („Службен весник на Република Македонија“ бр.46/10)
<b>Switzerland - Occupational Exposure Limits</b>	
Local name	Talc (exempt de fibres d'amiante) / Talk (asbestfaserfrei)
MAK (OEL TWA) [1]	2 mg/m <sup>3</sup> (a) / (a)
Critical toxicity	Poumons, Fibpulm / Lunge, Lungenfibrose
Notation	SS <sub>c</sub> / SS <sub>c</sub>
Remark	OSHA
Regulatory reference	www.suva.ch, 28.03.2022
4-TERT BUTYLPHENOL (98-54-4)	
<b>Austria - Occupational Exposure Limits</b>	
Local name	p-tert-Butylphenol
MAK (OEL TWA)	0.5 mg/m <sup>3</sup>
MAK (OEL TWA) [ppm]	0.08 ppm
MAK (OEL STEL)	2.5 mg/m <sup>3</sup> (2x 30(Miw) min)
MAK (OEL STEL) [ppm]	0.4 ppm (2x 30(Miw) min)
Remark	H, Sh. Fortpflanzungsgefährdend: f
Regulatory reference	BGBl. II Nr. 156/2021
<b>Croatia - Biological limit values</b>	
Local name	4-tert-Butilfenol (PTBP)
BLV	2 mg/l Karakteristični pokazatelj: PTBP - Biološki uzorak: mokraća - Vrijeme uzorkovanja: na kraju radne smjene 13.3 µmol/l Karakteristični pokazatelj: PTBP - Biološki uzorak: mokraća - Vrijeme uzorkovanja: na kraju radne smjene
Regulatory reference	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, граничним vrijednostima izloženosti i biološkim граничним vrijednostima (NN 91/2018)
<b>Denmark - Occupational Exposure Limits</b>	
Local name	p-tert-Butylphenol
OEL TWA [1]	0.5 mg/m <sup>3</sup>
OEL TWA [2]	0.08 ppm
Remark	H (betyder, at stoffet kan optages gennem huden)
Regulatory reference	BEK nr 1054 af 28/06/2022
<b>Germany - Occupational Exposure Limits (TRGS 900)</b>	
Local name	4-tert-Butylphenol
AGW (OEL TWA) [1]	0.5 mg/m <sup>3</sup>
AGW (OEL TWA) [2]	0.08 ppm
Peak exposure limitation factor	2(II)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); H - hautresorptiv; 11 - Summe aus Dampf und Aerosolen
Regulatory reference	TRGS900

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

4-TERT BUTYLPHENOL (98-54-4)	
<b>Germany - Biological limit values (TRGS 903)</b>	
Local name	4-tert-Butylphenol (p-tert-Butylphenol) (ptBP)
Biological limit value	2 mg/l Parameter: 4-tert-Butylphenol (p-tert-Butylphenol) (nach Hydrolyse) - Untersuchungsmaterial: U = Urin - Probenahmezeitpunkt: b) Expositionsende, bzw. Schichtende - Festlegung/Begründung: 05/2013 DFG
Regulatory reference	TRGS 903
<b>Slovakia - Occupational Exposure Limits</b>	
Local name	p-terc-Butylfenol (ptBP)
NPHV (OEL TWA) [1]	0.5 mg/m <sup>3</sup>
NPHV (OEL TWA) [2]	0.08 ppm
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
<b>Slovakia - Biological limit values</b>	
Local name	p-terc-Butylfenol (ptBF)
BLV	2 mg/l Zisťovaný faktor: ptBF - Vyšetrovaný materiál: moč - Čas odberu vzorky: b) koniec expozície alebo pracovnej zmeny
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (Zmena: 471/2011 Z.z.)
<b>Slovenia - Occupational Exposure Limits</b>	
Local name	4-terc-butylfenol
OEL TWA	0.5 mg/m <sup>3</sup>
OEL TWA [ppm]	0.08 ppm
OEL STEL	1 mg/m <sup>3</sup>
OEL STEL [ppm]	0.16 ppm
Remark	K (Lastnost lažjega prehajanja snovi v organizmu skozi kožo), BAT (Biološka mejna vrednost)
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
<b>Slovenia - Biological limit values</b>	
Local name	p-terc-butylfenol (PTBP)
BLV	2 mg/l Parameter: PTBP (po hidrolizi) - Biološki vzorec: urin - Čas vzorčenja: ob koncu delovne izmene
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
<b>Iceland - Occupational Exposure Limits</b>	
Local name	p-tert-Bútylfenól
OEL TWA	0.5 mg/m <sup>3</sup>
OEL TWA [ppm]	0.08 ppm
Remark	H (efnið getur auðveldlega borist inn í líkamann gegnum húð)
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
<b>North Macedonia - Occupational Exposure Limits</b>	
Local name	4-терц-бутилфенол
OEL TWA	0.5 mg/m <sup>3</sup>
OEL TWA [ppm]	0.08 ppm

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

4-TERT BUTYLPHENOL (98-54-4)	
KTV	4
Short time value [mg/m <sup>3</sup> ]	2 mg/m <sup>3</sup>
Short time value [ppm]	0.32 ppm
Remark	(KTV) краткотрајна вредност (КТВ) значи концентрација на опасни хемиски супстанции во воздухот на работното место внатре во зона на дишење, на која работникот без опасност по здравјето може да е изложен на покусо време. Изложеноста на краткотрајни вредности може да трае највеќе 15 минути и не смее да се повтори повеќе од четирипати во работната смена, при што меѓу две изложености на оваа концентрација мора да измине најмалку 60 минути. Краткотрајната вредност е изразена во mg/m <sup>3</sup> или во ml/m <sup>3</sup> (ppm) а е дадена како многукратни дозволени пречекорувања на граничната вредност; (K) својство на полесно пренесување на супстанците во организмот преку кожата; (BAT) биолошка гранична вредност – праг на биолошка гранична вредност, што значи предупредување на опасна хемиска супстанца и нејзини метаболити во кривата, телесните течности или издишувањето на воздухот, без оглед на тоа, дали опасната хемиска супстанца е внесена во организмот со вдишување, голтање или преку кожата
Regulatory reference	Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанции („Службен весник на Република Македонија“ бр.46/10)
Switzerland - Occupational Exposure Limits	
Local name	p-tert-Butylphénol / p-tert-Butylphenol
MAK (OEL TWA) [1]	0.5 mg/m <sup>3</sup>
MAK (OEL TWA) [2]	0.08 ppm
KZGW (OEL STEL)	1 mg/m <sup>3</sup>
KZGW (OEL STEL) [ppm]	0.16 ppm
Critical toxicity	Vitiligo / Vitiligo
Notation	S, B / S, B
Regulatory reference	www.suva.ch, 28.03.2022
Switzerland - BAT	
Local name	p-tert-Butylphénol / p-tert-Butylphenol
BAT	2 mg/l (13.3 µmol/l; Paramètre biologique: p-tert-Butylphénol; Substrat d'examen: Urine; Moment du prélèvement: Fin de l'exposition, de la période de travail.) / (13.3 µmol/l; Biologischer Parameter: p-tert-Butylphenol; Untersuchungsmaterial: Urin; Probennahmezeitpunkt: Expositionsende, bzw. Schichtende.)
Regulatory reference	Ordonnance 832.30 (OPA), article 50 al. 3, www.suva.ch/valeurs-limites / Verordnung 832.30 (VUV), Art. 50 Abs. 3, www.suva.ch/grenzwerte
3,6-DIAZAOCTANETHYLENEDIAMIN; TRIETHYLENETETRAMINE (112-24-3)	
Estonia - Occupational Exposure Limits	
Local name	Trietüleentetraamiin
OEL TWA	6 mg/m <sup>3</sup>
OEL TWA [ppm]	1 ppm
OEL STEL	12 mg/m <sup>3</sup>
Remark	S (Sensibiliseeriv aine)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 15.05.2021, 1)

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>3,6-DIAZAOCTANETHYLENEDIAMIN; TRIETHYLENETETRAMINE (112-24-3)</b>	
<b>Lithuania - Occupational Exposure Limits</b>	
Local name	Trietilentetraminas
IPRV (OEL TWA)	6 mg/m <sup>3</sup>
IPRV (OEL TWA) [ppm]	1 ppm
TPRV (OEL STEL)	12 mg/m <sup>3</sup>
TPRV (OEL STEL) [ppm]	2 ppm
Remark	J (jautrinantis poveikis)
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
<b>Poland - Occupational Exposure Limits</b>	
Local name	N,N'-bis(2-aminoetylo)etylenodiamina (trójetylenoczweroamina)
NDS (OEL TWA)	1 mg/m <sup>3</sup>
NDSch (OEL STEL)	3 mg/m <sup>3</sup>
Remark	Skóra (Oznakowanie substancji notacją „skóra” oznacza, że wchłanianie substancji przez skórę może być tak samo istotne jak przy narażeniu drogą oddechową).
Regulatory reference	Dz. U. 2018 poz. 1286
<b>Romania - Occupational Exposure Limits</b>	
Local name	Trietilentetramină/3,6-diazaoctantilendiamină
OEL TWA	10 mg/m <sup>3</sup>
OEL TWA [ppm]	1.7 ppm
OEL STEL	20 mg/m <sup>3</sup>
OEL STEL [ppm]	3.3 ppm
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
<b>Sweden - Occupational Exposure Limits</b>	
Local name	Trietylentetramin
NGV (OEL TWA)	6 mg/m <sup>3</sup>
NGV (OEL TWA) [ppm]	1 ppm
KTV (OEL STEL)	12 mg/m <sup>3</sup>
KTV (OEL STEL) [ppm]	2 ppm
Remark	S (Ämnet är sensibiliserande. Sensibiliserande ämnen kan ge allergi eller annan överkänslighet. Överkänslighetsbesvären drabbar främst huden eller andningsorganen. Överkänslighet innebär att man reagerar vid kontakt med ämnen som normalt inte ger besvär. Allergi är en undergrupp av överkänslighet som orsakas av reaktioner i kroppens immunsystem. Särskilt låga gränsvärden har fastställts för ämnen med mer uttalat luftvägssensibiliserande egenskaper. Några ämnen med starkt sensibiliserande egenskaper får endast hanteras efter tillstånd från Arbetsmiljöverket, se föreskrifterna om kemiska arbetsmiljörisker. Dessa ämnen har inga gränsvärden men i vissa fall riktvärden); V (Vägledande korttidsgränsvärde ska användas som ett rekommenderat högsta värde som inte bör överskridas)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
<b>Iceland - Occupational Exposure Limits</b>	
Local name	Tríetylentetraamín
OEL TWA	6 mg/m <sup>3</sup>

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

3,6-DIAZAOCTANETHYLENEDIAMIN; TRIETHYLENETETRAMINE (112-24-3)	
OEL TWA [ppm]	1 ppm
Remark	O (efnið er ofnæmisvaldandi)
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway - Occupational Exposure Limits	
Local name	Trietylentetramin
Grenseverdi (OEL TWA) [1]	6 mg/m <sup>3</sup>
Grenseverdi (OEL TWA) [2]	1 ppm
Remark	A: Kjemikalier som skal betraktes som at de fremkaller allergi eller annen overfølsomhet i øynene eller luftveier, eller som skal betraktes som at de fremkaller allergi ved hudkontakt.
Regulatory reference	FOR-2021-06-28-2248

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

##### Eye protection:

tightly fitting safety goggles. Eye bathing equipment should be available on the premises. Safety glasses

#### 8.2.2.2. Skin protection

No additional information available

#### 8.2.2.3. Respiratory protection

##### Respiratory protection:

Self-contained breathing apparatus. Respiratory protective device with a particle filter. [In case of inadequate ventilation] wear respiratory protection.

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Pale brown.
Odour	: Ammoniacal.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: > Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: insoluble in water
Viscosity, kinematic	: Not applicable
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 1.87
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

#### 9.2. Other information

##### 9.2.1. Information with regard to physical hazard classes

No additional information available

##### 9.2.2. Other safety characteristics

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Heat.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

In combustion emits toxic fumes.



# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

TALC (14807-96-6)	
LD50 oral rat	> 5000 mg/kg Source: ECHA
LD50 dermal rat	> 2000 mg/kg Source: ECHA
LC50 Inhalation - Rat	> 2.1 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)
LC50 Inhalation - Rat (Dust/Mist)	> 2.1 mg/l Source: ECHA

#### Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

#### Tris-2,4,6-(dimethylaminomethyl)phenol (90-72-2)

LD50 oral rat	2169 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1916 - 2455
---------------	---

Skin corrosion/irritation : Causes skin irritation.

#### Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)

pH	10.98 Temp.: 25 °C Concentration: 1 vol%
----	--

Serious eye damage/irritation : Causes serious eye damage.

#### Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)

pH	10.98 Temp.: 25 °C Concentration: 1 vol%
----	--

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

#### SILICA QUARTZ (14808-60-7)

IARC group	1 - Carcinogenic to humans
------------	----------------------------

#### TALC (14807-96-6)

IARC group	3 - Not classifiable
------------	----------------------

Reproductive toxicity : Suspected of damaging fertility.

STOT-single exposure : Not classified

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

#### SILICA QUARTZ (14808-60-7)

STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
------------------------	---

#### TALC (14807-96-6)

NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)
----------------------------	--

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

TALC (14807-96-6)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Fatty acids, C18-unsatd., dimers,oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Tris-2,4,6-(dimethylaminomethyl)phenol (90-72-2)	
NOAEL (oral, rat, 90 days)	15 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

Epoxy Putty 2122 Hardener	
Viscosity, kinematic	Not applicable
TALC (14807-96-6)	
Viscosity, kinematic	Not applicable

## 11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

Component	
4-TERT BUTYLPHENOL(98-54-4)	The substance is identified for having endocrine disrupting properties but there is no additional data available

### 11.2.2. Other information

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.
Not rapidly degradable	

TALC (14807-96-6)	
LC50 - Fish [1]	89581.016 mg/l Source: ECHA
LC50 - Fish [2]	110000 mg/l Test organisms (species): other:
EC50 96h - Algae [1]	7202.7 mg/l Source: ECHA
NOEC (chronic)	1459798 mg/l Test organisms (species): other: Duration: '30 d'
Fatty acids, C18-unsatd., dimers,oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
LC50 - Fish [1]	7.07 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	7.07 mg/l Test organisms (species): Daphnia magna

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)

EC50 72h - Algae [1]	4.34 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
----------------------	---

### Tris-2,4,6-(dimethylaminomethyl)phenol (90-72-2)

LC50 - Fish [1]	> 100 mg/l Test organisms (species): Cyprinus carpio
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	46.7 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	25.5 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

## 12.2. Persistence and degradability

### Epoxy Putty 2122 Hardener

Persistence and degradability	Readily biodegradable.
-------------------------------	------------------------

## 12.3. Bioaccumulative potential

### Epoxy Putty 2122 Hardener

Bioaccumulative potential	No bioaccumulation potential.
---------------------------	-------------------------------

### TALC (14807-96-6)

Partition coefficient n-octanol/water (Log Pow)	-9.4 Source: ECHA
---	-------------------

## 12.4. Mobility in soil

### Epoxy Putty 2122 Hardener

Additional information	Insoluble in water
------------------------	--------------------

## 12.5. Results of PBT and vPvB assessment

### Component

4-TERT BUTYLPHENOL (98-54-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
------------------------------	---

## 12.6. Endocrine disrupting properties

### Component

4-TERT BUTYLPHENOL(98-54-4)	The substance is identified for having endocrine disrupting properties but there is no additional data available
-----------------------------	--

## 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 3077	UN 3077	UN 3077	UN 3077	UN 3077
<b>14.2. UN proper shipping name</b>				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Polyamide, 4-tertbutylphenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Polyamide, 4-tertbutylphenol)	Environmentally hazardous substance, solid, n.o.s. (Polyamide, 4-tertbutylphenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Polyamide, 4-tertbutylphenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Polyamide, 4-tertbutylphenol)
<b>Transport document description</b>				
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Polyamide, 4-tertbutylphenol), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Polyamide, 4-tertbutylphenol), 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s. (Polyamide, 4-tertbutylphenol), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Polyamide, 4-tertbutylphenol), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Polyamide, 4-tertbutylphenol), 9, III
<b>14.3. Transport hazard class(es)</b>				
9	9	9	9	9
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	: M7
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5kg
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P002, IBC08, LP02, R001
Special packing provisions (ADR)	: PP12, B3
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	: T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (ADR)	: TP33
Tank code (ADR)	: SGAV, LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V13
Special provisions for carriage - Bulk (ADR)	: VC1, VC2

# Epoxy Putty 2122 Hardener

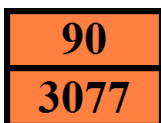
## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Special provisions for carriage - Loading, unloading and handling (ADR) : CV13

Hazard identification number (Kemler No.) : 90

Orange plates :



Tunnel restriction code (ADR) : -

EAC code : 2Z

### Transport by sea

Special provisions (IMDG) : 274, 335, 966, 967, 969

Limited quantities (IMDG) : 5 kg

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP02, P002

Special packing provisions (IMDG) : PP12

IBC packing instructions (IMDG) : IBC08

IBC special provisions (IMDG) : B3

Tank instructions (IMDG) : BK1, BK2, BK3, T1

Tank special provisions (IMDG) : TP33

EmS-No. (Fire) : F-A

EmS-No. (Spillage) : S-F

Stowage category (IMDG) : A

Stowage and handling (IMDG) : SW23

### Air transport

PCA Excepted quantities (IATA) : E1

PCA Limited quantities (IATA) : Y956

PCA limited quantity max net quantity (IATA) : 30kgG

PCA packing instructions (IATA) : 956

PCA max net quantity (IATA) : 400kg

CAO packing instructions (IATA) : 956

CAO max net quantity (IATA) : 400kg

Special provisions (IATA) : A97, A158, A179, A197, A215

ERG code (IATA) : 9L

### Inland waterway transport

Classification code (ADN) : M7

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 kg

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T\* B\*\*

Equipment required (ADN) : PP, A\*\*\*

Number of blue cones/lights (ADN) : 0

Additional requirements/Remarks (ADN) : \* Only in the molten state. \*\* For carriage in bulk see also 7.1.4.1. \*\*\* Only in the case of transport in bulk.

### Rail transport

Classification code (RID) : M7

Special provisions (RID) : 274, 335, 375, 601

Limited quantities (RID) : 5kg

Excepted quantities (RID) : E1

Packing instructions (RID) : P002, IBC08, LP02, R001

Special packing provisions (RID) : PP12, B3

Mixed packing provisions (RID) : MP10

Portable tank and bulk container instructions (RID) : T1, BK1, BK2, BK3

Portable tank and bulk container special provisions (RID) : TP33

Tank codes for RID tanks (RID) : SGAV, LGBV

Transport category (RID) : 3

Special provisions for carriage – Packages (RID) : W13

Special provisions for carriage – Bulk (RID) : VC1, VC2

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW31  
Colis express (express parcels) (RID) : CE11  
Hazard identification number (RID) : 90

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations  $\geq 0.1\%$  or SCL: 4-tert-butylphenol (EC 202-679-0, CAS 98-54-4)

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

##### Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).  
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).  
Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).  
Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).  
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : SILICA QUARTZ is listed  
SZW-lijst van mutagene stoffen : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : 4-TERT BUTYLPHENOL is listed  
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product  
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

### Switzerland

Storage class (LK) : LK 6.1 - Toxic materials  
Chemicals Ordinance (SR 813.11) : Group 2

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out  
All Components are listed on AICIS, or are exempt

## SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet

# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Abbreviations and acronyms:

STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

### Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2



# Epoxy Putty 2122 Hardener

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

---

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.